EDUCATOR COMPETENCIES
FOR PERSONALIZED, LEARNER-CENTERED TEACHING

August 2015

Jobs for the Future and the Council of Chief State School Officers

ACKNOWLEDGEMENTS

JOBS FOR THE FUTURE

Jobs for the Future is a national nonprofit that works to ensure educational and economic opportunity for all. We develop innovative career pathways, educational resources, and public policies that increase college readiness and career success, and build a more highly skilled workforce. With over 30 years of experience, JFF is the national leader in bridging education and work to increase mobility and strengthen our economy. JFF's **Students at the Center** initiative synthesizes and adapts for practice current research on key components of student-centered approaches to learning that lead to deeper learning outcomes. Our goal is to strengthen the ability of practitioners and policymakers to engage each student in acquiring the skills, knowledge, and expertise needed for success in college, career, and civic life.

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Council of Chief State School Officers

The **Council of Chief State School Officers** (CCSSO) is a nationwide, nonpartisan, and nonprofit membership organization committed to supporting state education leaders as they build public education systems that prepare every child for college, careers, and life. Within CCSSO, the **Innovation Lab Network** (ILN) is a group of leading states taking action to identify, test, and implement student-centered approaches to learning that will transform our public education system. Schools and districts within ILN states have been given the opportunity to act as pressure-testers of new and innovative ways to achieve deeper learning outcomes for every student, with backing and support from their state departments of education. In the context of the ILN, CCSSO acts as a centralizing entity that facilitates a learning community among state leaders while also providing individual support to ILN states as they advance their ILN agendas. With key partners including the Center for Innovation in Education, CCSSO provides critical leadership as states move forward with their innovative efforts.

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As college- and career-ready standards become a reality across the nation, educators and system leaders are increasingly exploring new models of teaching and learning that are more responsive to the needs of all students in our elementary and secondary schools. Known as **learner-centered, student-centered,** or **personalized learning** these approaches require a rethinking of the teaching and learning practices that have predominated public school instruction.

See Appendix A for a glossary of highlighted words.

Gone is the default image of a teacher—an adult lecturing to students seated neatly in rows, assigning the same textbook pages to everyone, and administering the same quiz on the same day to the entire class, with the expectation of a "normal distribution" of achievement along a bell curve. Instead, teachers in personalized, learner-centered settings are called upon to assess and address individual student needs and help all reach rigorous proficiency standards. These educators promote collaborative work among groups of students; integrate learning experiences that occur outside the classroom; and, above all, foster learner independence and student voice and choice, or **student agency.** Achieving this ambitious vision is only possible with significant changes in the very role of the educator and the ways in which educators interact with students, peers, and the broader community.

Learner-centered approaches have captured the imagination and loyalty of educators since the time of Dewey and the Progressive Movement, yet they have never been implemented at scale. What marks this era as any different? The renewed interest in personalized, learner-centered education today builds from a powerful combination of economic, scientific, egalitarian, and technological forces: We have a better understanding of what truly constitutes college and career readiness for an ever-changing, global marketplace. Cognitive neuroscience and learning theory research reveal close connections among motivation, agency, and learning. For the first time in our history, the nation is committed to preparing all students for success in postsecondary education

A NOTE ABOUT KEY TERMS: PERSONALIZED, STUDENT-CENTERED, LEARNER-CENTERED

The language used to name the educational approaches that are the focus of these Competencies has evolved rapidly over the past few years. Due to recent shifts in meaning, our organizations increasingly use the terms *student-centered*, *learner-centered*, and *personalized* as largely interchangeable in our literature. **For the purposes of these Competencies, we have decided to use one consistent phrase—"personalized, learner-centered,"** **which we believe best captures the spirit of approaches that build on the learner's needs and interests, regardless of age.** By contrast, *student-centered* can be used in some contexts to indicate only learners in a K-12 system, rather than learners at any educational stage or setting. Similarly, *personalized* by itself can be used to place a special emphasis on the use of technology, rather than on multiple instructional strategies.

For more on the language of this emerging field, please see the accompanying glossary *and sources such as:* Students at the Center's FAQs, *iNACOL's* Mean What You Say *report, and* this blog *by Next Generation Learning Challenges.*

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and careers. And the rapid expansion of technological advances and availability makes a level of personalization possible at scale as never before.

Given the pace and scope of these changes, many educators find themselves tackling challenges for which they are not fully prepared and devoting immeasurable energy to learning "on the fly" and on their own. Some noteworthy online and in-person professional development opportunities have emerged to support personalized, student-centered approaches.[i] Nonetheless, state and local teacher preparation and professional development systems across the country still do relatively little to advance abilities to deliver these approaches—nor have such competencies been defined in ways that system leaders can act upon them.

DEFINING AND BUILDING A KNOWLEDGE BASE FOR LEARNER-CENTERED APPROACHES

Multiple frameworks and research studies now identify an increasingly coherent set of knowledge, skills, and dispositions students need to succeed in the 21st century. Since 2010, Students at the Center has been working with academics and researchers to compile, synthesize, and analyze hundreds of research articles to develop a grounded definition of student-centered learning.[ii] The four key principles of student-centered learning—drawn from the mind/brain sciences, learning theory, and research on youth development—are overlapping and complementary. They are:

> Learning is **personalized**

> Learning is **competency based**

> Learning takes place **anytime, anywhere**

> Students have **agency** and **ownership** over their learning

In combination, and when guided by a coherent and rigorous set of educational goals, these principles provide a strong foundation for the pursuit of **deeper learning** – the knowledge, skills, and dispositions necessary to prepare every student for college, career, and civic life.

A small but growing group of studies following the release of the Students at the Center framework provides further substantiation for this vision (e.g., Zeiser et al. 2014; Pellegrino & Hilton 2012).[iii]

Every school and district that shares this vision will use different techniques to translate student-centered principles into practice. Some schools will move to a fully project-based curriculum; others will have an **Individual Learning Plan** for each student. However, all such settings share a commitment to: 1.) reach high-quality implementation across the four key principles; 2.) achieve the goals of college, career, and civic success for all students; and 3.) focus on building communities of educators with the skills outlined in this document.

The development of *Educator Competencies for Personalized, Learner-Centered Teaching* ("the Competencies") serves as a first step in identifying the knowledge, skills, and dispositions that educators need in order to create and thrive in effective personalized, learner-centered environments. The Competencies are organized into four domains—Cognitive, Intrapersonal, Interpersonal, and Instructional. For each domain, we identified both high-level competencies and detailed "indicators," which describe specific ways that educators can meet each competency in a personalized, learner-centered manner.

The lead contributors to this effort consisted of a group of national and state partners focused on increasing educational achievement for all: Jobs for the Future's Students at the Center initiative, the Council of Chief State School Officers' Innovation Lab Network, the National Center for Innovation in Education at the University of Kentucky, the Institute@CESA#1 in Wisconsin, and the Nellie Mae Education Foundation. The partners solicited and received feedback from nearly 100 school, district, and state innovators, researchers, and thought leaders from across the country. *(See Appendix B for a summary of the methodology used to develop these Competencies.)*

Guiding principles

Throughout the research and writing process, we faced many difficult decisions about what the Competencies should include and how best to organize them. Together with our partners and advisors, we arrived at a number of key principles to guide and inform our work and perspective. We determined that the Competencies should:

> **Be embedded within a holistic educational vision and supported by a school culture—including professional development, curricular freedom, and other structures—to ensure their success.** We recognize that many obstacles beyond teachers' control must be cleared in order to realize success in most or all of the Competencies. The Competencies are designed first and foremost to inform practitioners who work in school systems that are already making innovative, learner-centered reforms.

> **Be applied to groups of educators or whole school teams.** We recognize that, taken as a whole, the full set of Competencies is aspirational. In our vision, no individual educator would be expected to have mastered all of these skills and be able to demonstrate each one flawlessly at any single moment in time. Our intent, in no way, is to ask teachers to "do more with less." Rather, we are calling for schools, districts, and states to "do differently."

> **Align with similar efforts to describe student competencies, system leader competencies, and system characteristics for deeper learning.** Our description of the innovative, learner-centered educator is aligned with complementary efforts to describe the competencies that students need for deeper learning, the competencies that administrators need to lead personalized, learner-centered schools and districts, and the regulations and policies needed to support these efforts at scale and over time.

> **Convey a firm and explicit commitment to equity.** These competencies describe the kinds of capabilities educators need to succeed with all learners, of any socio-economic background, race, ethnicity, skill level, learning disability, or culture. They are compiled from research, practice, and evidence that cross these categories. Wherever applicable, we make this commitment transparent.

> **Focus on knowledge, mindsets, and skills that go beyond general "good teaching" practices to emphasize areas that comprise successful approaches in personalized, learner-centered settings.** Many existing standards and frameworks for educator development include "good teaching" practices that are applicable in all settings. Rather than reiterate these fundamentals,

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this framework highlights the specific competencies that are most applicable—and essential—to the distinct context of personalized, learner-centered environments.

> **Not be read as progressions or prioritized until further research can be conducted.** We do not currently have enough information about implementation of personalized, learning-centered approaches to prioritize the domains, or outline a progression for training in the competencies. Our organizations, state partners, and others will be pursuing the development of such tools as the work continues and further field testing is conducted.

Why a new framework?

This is the first attempt to specifically and comprehensively identify a set of competencies for educators striving to move beyond our legacy system and practices in order to transition to personalized learning environments. At the same time, we recognize the value and substance of other more well-established frameworks, such as The Danielson Group's *Framework for Teaching*, an early innovator describing high-quality teaching for learning; and The Interstate Teacher Assessment and Support Consortium (InTASC), which produced a comprehensive set of *Teacher Standards* that point the way for states to evaluate excellence in teaching. Some of the individual competencies, particularly in the Cognitive Domain, build directly on these foundational efforts. We also incorporated some of most relevant components from newer frameworks, such as The International Association for K-12 Online Learning (iNACOL)'s *Blended Learning Teacher Competency Framework. (See Appendix C for the complete list of educator frameworks scanned and synthesized for this project.)* Yet the Competencies and the accompanying Indicators are the only complete educator vision designed for a learner-centered setting, thereby setting this undertaking apart.

Furthermore, in contrast to teacher *standards* (such as InTASC), which are high-level statements of what teachers should know and be able to do, the Competencies offer an interpretation of how to translate standards within the context of personalized, student-centered learning models. *(See Appendix D for a crosswalk between the Competencies and the InTASC standards.)*

We hope the similarities between the Competencies and other frameworks provide a sense of familiarity and respect for the practices of many talented teachers out in the field. A personalized, learner-centered education approach does not throw out previously gained knowledge and evidence of good teaching and learning. Far from it. Instead, this framework deliberately builds a bridge from those foundations toward a vision of how the teaching profession can evolve to meet the changing needs of learners.

Who should use this framework and how?

As noted above in our Guiding Principles, we developed these Competencies for school systems already making bold strides to implement personalized, learner-centered approaches. We designed them in collaboration with these innovators to help support their efforts to develop new education models that strive for college and career readiness for all.

Our intent is for this framework to serve as a "living" tool to guide educator development, so that a growing number of teachers are able to help scale the transformation to personalized, student-centered learning. To that end, the Competencies, will be available in a digital format on the web this fall. This format will enable us to continue to improve and tighten the Competencies as they are piloted and additional feedback is gathered. Within schools, practitioners may want to utilize the competencies for self-assessment, quality improvement, professional development, hiring decisions, and culture reinforcement. In addition, with appropriate stakeholder engagement and ongoing research, district and state leaders may find the competencies useful in informing their efforts to develop teachers, such as through the design of educator standards, licensure requirements, preparation program curricula, induction processes, or educator effectiveness systems.

Where do we go from here?

We recognize that defining personalized, learner-centered competencies is only one piece of a complex puzzle. We cannot expect educators to achieve these Competencies at any scale or level of sustainability without supportive policy, communication, school structures, school leaders, and professional development. Nor can they be adopted in the current form without piloting, evaluation, guidance, training, and improvement.

Fortunately, steps are underway to start to address these many challenges. Several organizations have recently released papers or are embarking on efforts to rethink how we train, recruit, support, and deploy educators—including school leaders—in order to achieve a workforce capable of meeting students' current and future needs.[iv]

We will follow the release of this list with a two-phase implementation plan. These additional efforts will make the competencies more practical, digital, and sustainable (e.g., by adding a video and exemplar database, and exploring potential use in teacher preparation, certification, and support). First, we are convening a meeting of policymaker and implementer teams from nine Innovation Lab Network states during summer 2015. Teams will consider how their state can begin to operationalize the competencies and how to share learning and resources as they begin to move the competencies from theory into practice. Together we will explore what additional experimentation, evidence, rubrics, and progressions may be called for in order to offer specific guidance for policymakers on how to incorporate these into workforce preparation, certification, and assessment policies.

Second, we will be turning this list into a digital tool bolstered by numerous resources, examples, and videos on the Students at the Center Hub. The digital version will be available in late 2015. We welcome additional feedback and resource suggestions sent via the contact section on the Hub.

The Educator Competencies
for Personalized, Learner-Centered Teaching

The *Educator Competencies for Personalized, Learner-Centered Teaching* build on and push beyond the best existing teaching competencies and standards to capture what educators need in order to create and thrive in personalized, learner-centered systems.

The Competencies are organized into four domains:

COGNITIVE
NEED TO KNOW

INSTRUCTIONAL
NEED TO DO

INTRAPERSONAL
NEED TO PROCESS

INTERPERSONAL
NEED TO RELATE
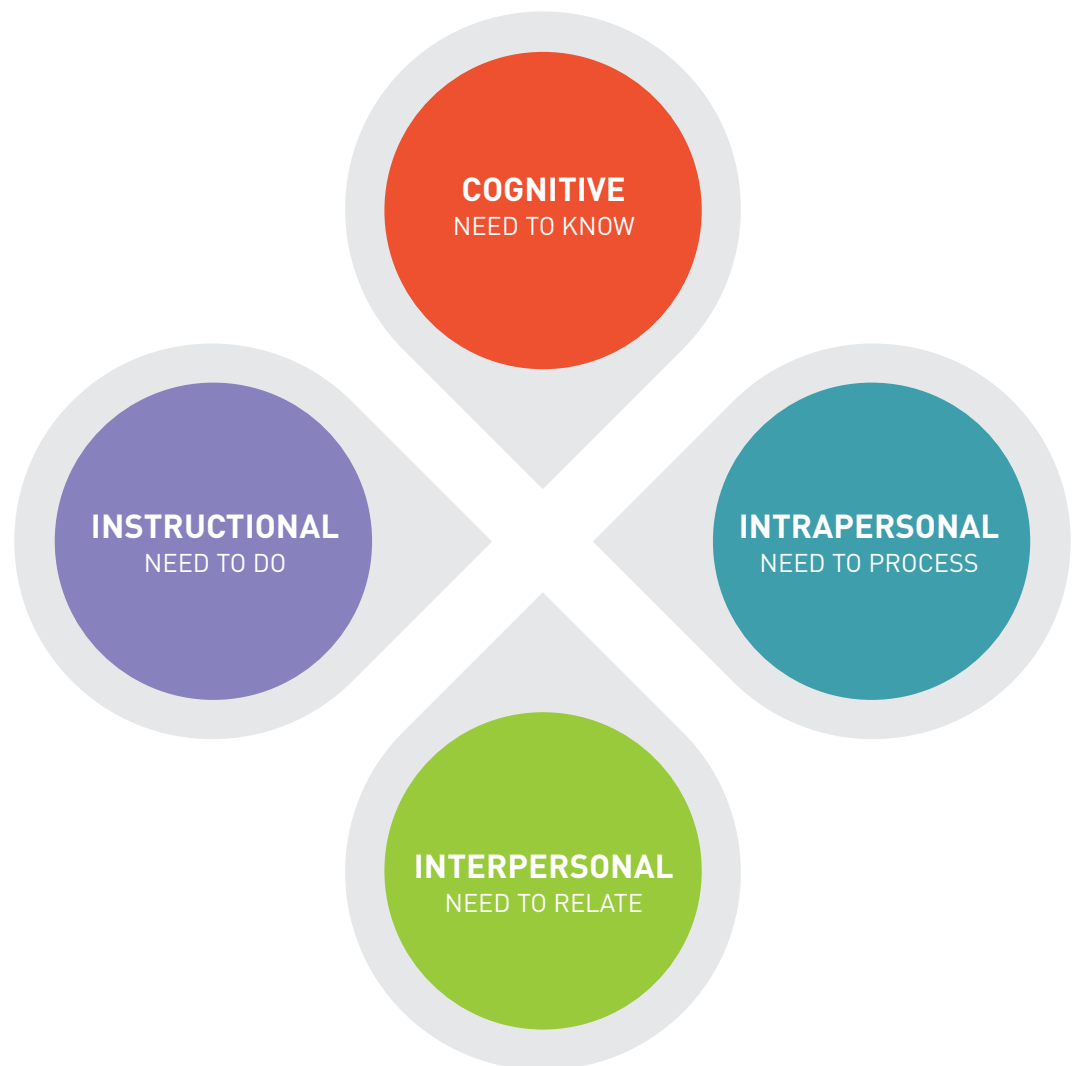
Cognitive Domain / need to know: the academic content and knowledge of brain and human development that personalized, learner-centered educators need to know in order to foster students' cognitive and **metacognitive** development.

Example: A mathematics teacher knows how to solve quadratic equations and received training on how to teach them. She also learns how to identify student misconceptions and redirect their learning around particularly "sticky" areas of quadratics. To augment her knowledge, she layers on a basic understanding of child development to identify ways to engage reluctant learners and keep them moving forward.

Intrapersonal Domain / need to process: the set of "internal" skills and habits of mind that personalized, learner-centered educators need to process, such as a growth mindset, high expectations for students, and inquiry-based approaches to the teaching profession.

Example: An educator tries a new lesson technique, but soon realizes that only a few students seemed engaged, while several others appeared to tune out. Afterwards, he shares with the class what he was trying to accomplish. He then solicits feedback on what worked well for some of the students and how he could improve for others. With the students' input and his new understanding, he prepares to try the technique again another day, incorporating additional background reading and a study hour for self-selected students who needed better content grounding.

Interpersonal Domain / need to relate: the social, personal, and leadership skills educators need to relate with students, colleagues, and the greater community, particularly in multicultural, inclusive, and linguistically diverse classrooms.

Example: In one high school, teachers team to up offer "unique courses and experiences" in cross-curricular topics such as "Society, Literature, Truth, and Public Affairs." Throughout each course, teachers work with students to connect the exploration of academic content standards to the modern-day issues that matter most to each individual student. To help make the learning experience relevant and meaningful, teachers work with building and community leaders to design a final project in which students lead roundtable discussions with school administrators, School Board members, and other community stakeholders to justify why the course is worthwhile and should be continued for future generations.

Instructional Domain / need to do: the pedagogical techniques that educators use—what they need to do—in order to sustain a personalized, learner-centered environment for all students.

Example: A team of teachers develops a technology-enabled system to help track and respond to elementary students' progress in reading throughout the year. By integrating systems for recording audio, live-blogging, and cataloguing feedback, students can now record themselves reading and receive real-time feedback from teachers and their peers. Teachers use this information when conferencing with individual students throughout the week, and also analyze patterns to determine what skills certain groups of students can work on together. Students can review their past performances as they work with teachers to set their next goals in reading.

Cognitive Domain / NEED TO KNOW

The COGNITIVE DOMAIN consists of what teachers **need to know** in order to create personalized, learner-centered environments. These include both the knowledge of key subject matter content, and human and brain development that is needed in order to foster students' content learning and **metacognitive** development (e.g., critical thinking, information literacy, reasoning, argumentation, innovation, self-regulation, and learning habits).[v]
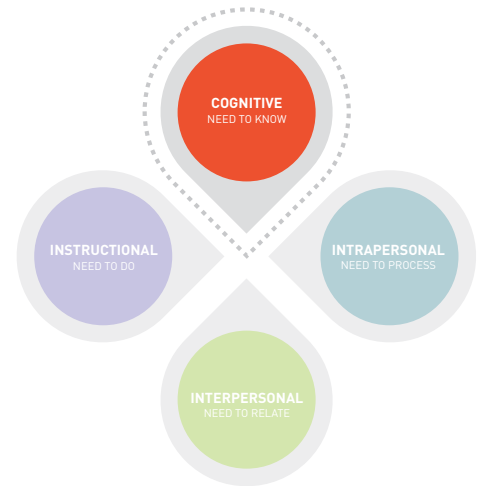
A NOTE ABOUT KEY TERMS:

For the purposes of these Competencies, we decided to use the term **mastery** over closely related terms such as **performance-based, competency,** and **proficiency.** We recognize that each of these terms has its own history and theoretical implications. We sought a more neutral term to denote learning, rather than one associated with a specific academic intervention or approach (i.e., competency-based education). As noted in the glossary, our use of the term refers to: *The targeted level of achievement relative to a standard or learning goal.* "Demonstrating mastery" is synonymous with "demonstrating   proficiency" or "meeting the standard."

COGNITIVE COMPETENCIES

Successful educators in a **personalized, learner-centered** setting will:

1 Utilize in-depth understanding of content and learning progressions to engage learners and lead individual learners toward mastery.

INDICATORS:

a. Communicate the central concepts, tools of inquiry, and structures of the content area(s) (e.g., algebra teachers need to know the math; which algebraic concepts are most important, which are foundational, and which are more complex; and how to explain the math in multiple ways).

b. Use knowledge of learning progressions and the cumulative nature of content matter in order to build students' solid understanding of the subject area; identify misconceptions as they arise; and intervene to overcome them with individualized scaffolds, richer analysis or explanations, and/or more targeted forms of practice.

c. Create, use, or adapt rubrics that clearly define what "mastery" looks like for key content-based concepts.

d. Create learning experiences that make the content-based concepts accessible and meaningful (e.g., to understand the "why," as well as the "how").

e. Present content-based concepts (both within and across disciplines) through a variety of perspectives in order to engage learners in critical thinking, creativity, **transfer,** and collaborative problem solving related to authentic local and global issues.

2 **Have knowledge of the sub-skills involved in effective communication and apply it to instructional strategies that develop learners into effective communicators.**

INDICATORS:

a. Break down the skills of communication in deliberate and supported opportunities for students to practice both through content and skill area(s):

    i.   Offer demonstration opportunities publicly with peers and adults, and through written, oral, listening, and other means reflective of 21st century communication.

    ii. Ensure students can perform the standards of discourse, academic language, and argumentation in specific content area(s).

    iii. Whenever possible, ensure standards and assessments connect to real- world experiences and performances span diverse media (e.g., not simply reading a book report out loud).

b. Apply feedback techniques

    i.   Provide constructive feedback on communication skills.

    ii. Teach students how to give and receive feedback on performance, draft work products, and learning strategies used.

3 **Understand and employ techniques for developing students' skills of metacognition, self-regulation, and perseverance.**

INDICATORS:

a. Use modeling, rehearsal, and feedback techniques that highlight the processes of thinking rather than focusing exclusively on the products of thinking.

b. Differentiate between behavior and learning outcomes related to self-regulation (ability to control and take responsibility for one's own focus and effort), rather than perceived ability (belief in one's capabilities and limits) and adjust interventions accordingly.

c. Demonstrate familiarity with the concepts of intrinsic versus extrinsic motivation to learn, using a variety of tools that support students' ability to maintain high expectations for goals over extended periods of time.

d. Know how to help students determine priorities and develop skills on how to choose between competing interests.

Intrapersonal Domain / NEED TO PROCESS

The INTRAPERSONAL DOMAIN contains the generalized "capacity to manage one's behavior and emotions to achieve one's goals"[vi] or what internal capacity personalized, learner-centered educators **need to process.** It comprises the habits of mind, expectations for students, and assumptions about the teaching profession that educators should have.

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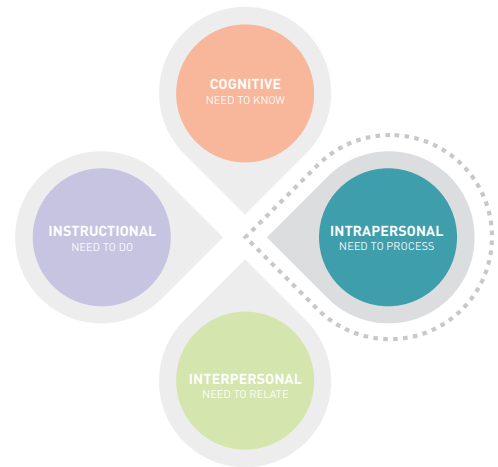
NOTE:

Many of these competencies and indicators have analogous characteristics in the **inter**personal domain. The areas listed here emphasize the means to capture educators' internal processes, whereas the **inter**personal merge these thought processes with the relationships and behaviors to enact them.

INTRAPERSONAL COMPETENCIES

Successful educators in a personalized, learner-centered setting will:

1 **Convey a dedication to all learners—especially those historically marginalized and/or least served by public higher education—reaching college, career, and civic readiness.**

INDICATORS:

a. Recognize, make transparent, discuss, and adapt as necessary to the cultural biases and inequitable distribution of resources that may challenge learners from attaining postsecondary credentials and career advancement while remaining culturally sensitive and aware of celebrating students' diversity.

b. Create structured opportunities in professional development and instruction to reflect on equity, civic participation, and their intersections.

c. Demonstrate ability to reflect on personal social location and privilege, and awareness of systemic and interpersonal forms of oppression.

d. Demonstrate awareness of and remedies for unintentional biases, such as lowered expectations of productivity.

e. Be aware of and adept at referring students to services—both inside and out of school—to reduce barriers to learning.

f. Use of restorative practices in classes to drive student learning of social responsibilities, foster respected learning communities, and promote inclusion.

2 **Demonstrate an orientation toward and commitment to a personalized, learner-centered vision for teaching and learning.**

INDICATORS:

a. Exhibit a willingness to use and continuously improve practices that reshape and expand the role of the educator such as:

   i. Engaging in flexible facilitation of learning.

   ii. Fostering student independence (i.e., building student confidence and knowing when to step back).

   iii. Providing frequent and timely feedback to students.

   iv. Using student products and performance to drive shifts in practice, without lowering achievement standards and expectations in the classroom for all students.

   v. Building relationships with students that foster their learning success.

   vi. Practicing and seeking to improve the skills described in the Instructional Competencies domain.

3 **Engage in deliberate practices of adapting and modeling persistence and a growth mindset.**

INDICATORS:

a. Demonstrate how competence and confidence are gained through effort, assistance, and time.

b. Demonstrate ability to strive toward ambitious, long-term educational and professional goals.

c. Use mistakes, failures, and struggle as opportunities for growth.

d. When necessary, prioritize progress and delay gratification to sustain effort even amid challenges and setbacks and helps students understand how to do so.

4 **Facilitate and prioritize shifting to and maintaining a learner-centered culture.**

INDICATORS:

a. Model willingness to share reflections on and transparency around successes, failures, and challenges.

b. Demonstrate cultural sensitivity, awareness, and responsiveness.

c. Establish a classroom culture where risk taking is safe.

d. Establish a classroom culture where help seeking is safe.

e. Model flexibility to easily shift focus and resources to meet ever changing priorities and respond to problems and multiple demands as challenges rather than obstacles.

5 **Demonstrate an orientation toward and commitment to lifelong professional learning.**

INDICATORS:

a. Seek opportunities to learn new skills, deepen practices, and collaborate with others.

b. Explicitly use modeling behavior to foster autonomy and lifelong learning skills in students.

c. Maintain an explicit orientation toward change and improvement though behaviors such as:

    i. Seeking out high-quality research to inform reflective practice.

    ii. Seeking out contradictory evidence to inform beliefs.

    iii. Welcoming and responding constructively to observation, feedback, and critique.

d. Take advantage of new tools and resources to enhance teaching, especially technological resources such as online professional communities and "anytime/anywhere" coursework.

6 **Analyze evidence to improve personal practices.**

INDICATORS:

a. Use **design thinking** or other **continuous improvement** approaches for short-cycle reflection or evaluation to examine personal practice, identify student needs, set goals, develop improvement plans, track next steps, share learning with peers, and communicate choices to learners, families, other professionals, and the community.

b. Remain reflective and focused on improvement and innovation.

c. Involve students in reflecting on teaching practices and the learning environment.

d. Use research-based best practices, as well as professional judgment, to select and scaffold materials.

Interpersonal Domain / NEED TO RELATE

The INTERPERSONAL DOMAIN comprises the generalized ability to "express ideas and interpret and respond to messages from others."[vii] Encapsulating personalized, learner-centered educators' **need to relate,** this domain includes the social, personal, and leadership skills to foster beneficial relationships with students, peers, and the greater community.

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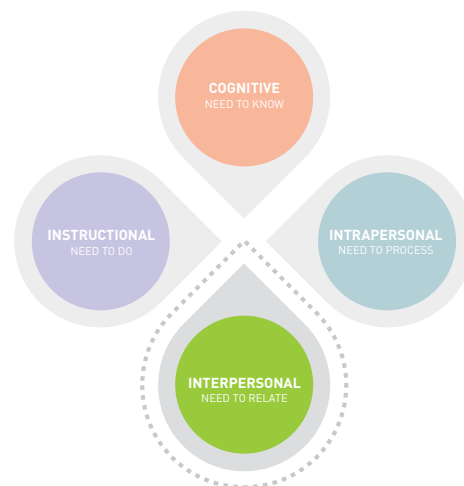
NOTE:

Many of these competencies and indicators have analogous characteristics in the **intra**personal domain. The areas listed here pertain more to capturing educators' external communication and relationships, whereas the **intra**personal ones place greater emphasis on the educators' internal thought processes.

INTERPERSONAL COMPETENCIES

Successful educators in a personalized, learner-centered setting will:

1 **Design, strengthen, and participate in positive learning environments (i.e., school and classroom culture) that support individual and collaborative learning.**

INDICATORS:

a. Contribute to professional learning environments that embrace a culture of inquiry and innovation, cross- or interdisciplinary-teaching, shared accountability for student learning, student reflection and **self-assessment,** and constructive **peer assessment.**

b. Contribute to student learning environments that are physically and emotionally safe, welcoming, and affirming.

c. Contribute to learning environments that build students' ability to engage in self-directed learning and emphasize opportunities for **student voice and choice,** such as their ability to co-design their own learning paths, self-assess and reflect, and provide constructive peer feedback.

d. Deliberately build students' ability to learn from peers, especially those of different backgrounds or academic/career trajectories, through modeling and feedback techniques.

e. Demonstrate proper conflict management.

f. Model respectful communication with supervisors, peers, students, parents, and the broader education community in written, electronic, and face-to-face exchanges.

g. Create and/or fulfill assigned roles on a team or group to contribute to staying focused, participatory, and on track to meeting group goals.

2 **Build strong relationships that contribute to individual and collective success.**

INDICATORS:

a. Develop individual relationships with students that support their social and emotional growth, while setting and maintaining appropriate boundaries.

b. Create collaborative in-school partnerships with peer educators, administrators, content experts, and others within the school building that support communities of practice to enhance individual and group student learning.

c. Build relationships with families, community members, businesses, and others outside of the school to support communities of practice that enhance individual and group student learning, including:

    i. Open communication channels, online and in person.

    ii. Collaborative partnerships in which each member has a clear role, purpose, and value.

d. Be explicit with students about the value of networks or communities and help them understand how to construct networks and communities pursuing their academic and career goals.

3 **Contribute to college and career access and success for all learners, particularly those historically marginalized and/or least served by public higher education due to differences in background, demographics, learning style, or culture.**

INDICATORS:

a. Work with students to ensure all students have the access and supports to master the skills and credits necessary to succeed in postsecondary education and employment.

b. Provide age-appropriate and individualized career exploration, planning, and connections to graduation counseling.

c. With peers, build and contribute to structures and strategies that foster cultural competency, commitment to equity, and are supportive of all learners.

4 **Seek appropriate individual or shared leadership roles to continue professional growth, advancement, and increasing responsibility for student learning and advancement.**

INDICATORS:

a. Seek or create opportunities to serve as a teacher-leader, mentor, coach, or content expert within the school, district, or state.

b. Share successes and struggles with other educators and actively participate in professional renewal opportunities.

c. Develop and employ a range of influence strategies to more effectively build and sustain support across peers for learner-centered approaches.

d. Build relationships for the purpose of motivating other team members' performance.

Instructional Domain / NEED TO DO

Skills in the INSTRUCTIONAL DOMAIN describe what personalized, learner-centered educators **need to do** to bring distinctly learner-centered pedagogical techniques into the classroom. These include creating engaging and relevant curriculum, managing classroom dynamics, and using instructional approaches and methods that build toward and assess **mastery.**

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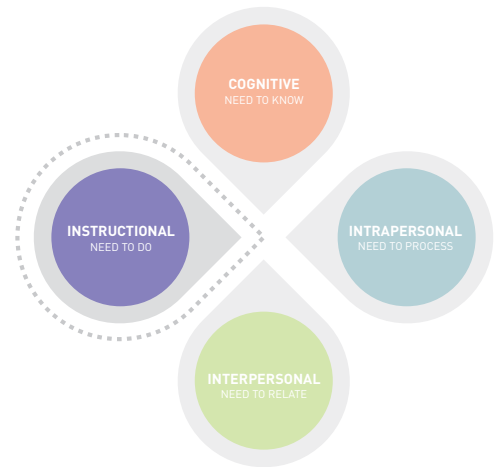
INSTRUCTIONAL COMPETENCIES
Successful educators in a personalized, learner-centered setting will:

1 **Use a mastery approach to learning.**

INDICATORS:

a. Build curriculum units from essential questions, recognized standards, school-wide, and/or subject-specific competencies, and/or real-world problems to be solved.

b. Determine students' progress, advancement, and pace via various methods of demonstrated understanding of the content, skills, and application of learning goal.

c. Customize and scaffold instruction, supports, and pacing so that all learners can master the content and fill gaps in understanding.

d. Maintain a focus on high expectations for achievement while providing feedback and opportunities for practice, revision, and improvement.

2 **Use assessment and data as tools for learning.**

INDICATORS:

a. Apply the use of data (quantitative and qualitative) systematically to understand individual skills, gaps, strengths, weaknesses, interests, and aspirations of each student, and use that information to design and modify personalized learning paths toward meeting school, district, and state standards.

b. Use multiple, frequent, and **formative assessments** —such as self-assessment, **exit tickets,** and student surveys—in a timely manner to engage learners in their own growth, to monitor learner progress, to guide educators' and learners' decision making, and to communicate with families.

c. Facilitate students' creation of a portfolio, exhibition, or other public showcase tool to serve as a culminating event at appropriate educational junctures.

d. Develop, use, and involve the students in the creation of assessment tools that are flexible and that clearly articulate standards and criteria for meeting those standards.

3 **Customize the learning experience.**

INDICATORS:

a. Recognize and integrate knowledge of individual learners, diverse cultures, and the community context in developing materials and pedagogy to ensure inclusive learning environments that enable each learner to meet rigorous standards.

b. Co-construct and offer choice among multiple means for students to demonstrate mastery.

c. Scaffold, customize whenever possible, and provide adequate supports and interventions to appropriately stretch each learner, informed by teacher expertise.

d. Document and track learning trajectories that meet each learner's readiness, strengths, needs, and interests.

    i. Update and refine pre-existing **individual learning plans** or co-design an individual learning plan with each student and family as necessary.

    ii. Use the plan to build effective individual and collective learning experiences.

e. Use technology to lessen the burden of tracking student progress, finding materials, engaging learners in different ways, and offer academic supports.

4 **Promote student agency and ownership with regard to learning.**

INDICATORS:

a. Encourage student voice and choice via strategies such as:

    i. Providing access for students to monitor their progress and set goals.

    ii. Enabling curricular choice and co-design.

    iii. Providing students with multiple options for demonstrating mastery of a standard or competency.

    iv. Providing opportunities for students to contribute to classroom or school-based decision-making processes, including participatory action research, place-based education, restorative circles, and class meetings.

b. Develop students' abilities to self-reflect and self-regulate via strategies such as goal setting, self-assessment, and self-pacing.

c. Develop students' abilities to collaborate with peers via strategies such as peer assessment and project-based learning.

d. Cultivate students' growth mindsets.

e. Help students manage their own behavior to optimize the learning environment for all.

f. Engage in and positively influence students' perceptions of their efficacy, interest, and purpose.

5 **Provide opportunities for anytime/anywhere and real-world learning tied to learning objectives and standards.**

INDICATORS:

a. As described in the interpersonal competencies, build relationships with families, community members, businesses, and others outside of the school to support communities of practice that enhance individual and group student learning.

b. Align out-of-school experiences to the relevant academic competencies or standards, so that students may demonstrate mastery and receive in-school credit based on these out-of-school experiences.

c. Demonstrate fluency with the curricular and personal aspects of providing a successful **blended learning** experience.

d. Develop diverse physical and digital environments that maximize learning within, across, and beyond classrooms.

6 **Develop and facilitate project-based learning experiences.**

INDICATORS:

a. Engage learners and other faculty in co-designing projects that stretch and deepen the learning experience.

b. Use collaborative, cross-curricular projects to develop learners' deep understanding of content areas, connections to applications beyond school, and skills to apply knowledge in meaningful ways.

c. Emphasize regular student reflection about specific questions that draw out the learning within the project.

7   Use **collaborative group work.**

INDICATORS:

a. Develop, scaffold, facilitate, and where appropriate co-design collaborative group work.

b. Analyze collaborative group work to ensure that it engages and stretches each learner and builds toward **mastery** of specific skills, standards, or student competencies.

c. Foster students' ability to identify specific teamwork skills necessary for collaborative group work that are similar to the skills and dispositions necessary for college, career, and civic success.

d. Ensure students have developed the knowledge and skills needed for successful collaborative group work:

   i. clearly defined roles, purpose of collaborative group work, and understanding of assessments

   ii. establishing structures for and practicing how to share ideas and benefit from ideas and skills of others

   iii. practice in tools and techniques such as Socratic questioning and constructive feedback.

8   Use technology in service of learning.

INDICATORS:

a. Adopt, adapt, and create high-quality digital resources for curriculum.

b. Enhance ability to provide real-time assessment and learning tracking with new digital tools.

c. Employ the principles of universal design for learning.

d. Provide opportunities for all students to learn in a digital setting (synchronous and asynchronous).

e. Promote the development of "digital fluency" in students to enhance their ability to interact in our digital world.

f. Discern when technology use in instruction improves engagement, collaboration, and learning, and when it does not.

g. Promote collaborative and real-world project-based learning opportunities enhanced with digital tools and content.

Appendix A
Glossary of Terms

TERM	DEFINITION	SOURCE*
Anytime/anywhere learning	**Students have equitable opportunities to learn outside of the typical school day and year, and outside of the classroom or school, often by using digital technologies that allow them to study and complete assignments at any location and at any time.** Some systems and states are experimenting with means for awarding credit based on these experiences. (Closely related terms: blended learning, project-based learning, real-world learning.)	"The Students at the Center Framework." http://studentsatthecenterhub.org/interactive-framework/
Agency	**The initiative and capacity to act in a way that produces meaningful change in oneself or the environment.** (Closely related terms: ownership, student-ownership)	Wolfe, Steinberg, & Hoffman (2013)
Benchmarks	**Discrete and measurable learning objectives by which to demonstrate competency.**	Wolfe (2012), p. 12
Blended learning	**Any formal education program in which a student learns in part through online learning and in part in a supervised brick-and-mortar location away from home.** The modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience. High quality blended learning combines the best of face-to-face instruction with the best of learning online and some elements of student control over time, place, path, and/or pace.	Patrick & Sturgis (2015), p. 17
Collaborative Group Work	**Students engage in learning by constructing group solutions, texts, experiments, or works of art.** Effective group work is well planned and strategic. Students are grouped intentionally, with each held accountable for contributing to the group work. Activities are designed so that students with diverse skill levels are supported, as well as challenged by their peers. They are planned around meaningful tasks in the subject area that are conceptually rich, engaging, with multiple entry points.	"Common Instructional Framework." http://www.jff.org/services/early-college-design-services/common-instructional-framework

* Definitions are either excerpted or adapted from the sources listed. Additional selected sources are listed in Appendix E.

TERM	DEFINITION	SOURCE*
Competency	**The enduring understanding of content, skills, and dispositions in a specific domain.** Competencies are observable and eventually measurable.	Wolfe (2012), p. 12
Competency-based education	**Students move ahead based not on classroom hours but on their demonstration that they have actually learned material, reaching key milestones along the path to mastery of core competencies and bodies of knowledge.** "Learning is the constant, time is the variable." Tasks and learning units might be individual or collective, and students have multiple means and opportunities to demonstrate mastery through performance-based and other assessments. Each student receives the scaffolding and differentiated support to progress at a pace appropriate to reaching college, career, and civic outcomes, even when unequal resources are required to achieve a more equitable result. (Closely related terms: proficiency-based learning/education, mastery-based learning/education.)	"The Students at the Center Framework"; for a more detailed definition, see the CompetencyWorks Wiki: http://bit.ly/1P1w8LX
Continuous improvement	**Any school- or instructional-improvement process that unfolds progressively over extended periods of time without a predetermined end point.** The concept rests on the belief that improvement requires an organizational or professional commitment to an ongoing process of learning, self-reflection, adaptation, and growth.	Ed Reform Glossary. http://edglossary.org/continuous-improvement/
Deeper Learning	A set of competencies students must possess to succeed in 21st century jobs and civic life, including: 1. Master core academic content 2. Think critically and solve complex problems 3. Work collaboratively 4. Communicate effectively 5. Learn how to learn 6. Develop academic mindsets[viii] (Closely related: 21st century skills: critical thinking, collaboration, communication, creativity, perseverance)[ix]	Hewlett Foundation. http://www.hewlett.org/library/hewlett-foundation-publication/deeper-learning-defined

* Definitions are either excerpted or adapted from the sources listed. Additional selected sources are listed in Appendix E.

Appendix A: Glossary of Terms

TERM	DEFINITION	SOURCE*
Cultural responsiveness	**Learners have opportunities to engage with content through various cultural lenses and perspectives and to draw from their cultural backgrounds to build their learning.**	"Personalized Learning." http://www.cesa1.k12.wi.us/institute/designdevelop/personalized-learning.cfm
Design thinking	**An orientation to learning that** focuses on identifying need, challenging assumptions, generating a range of possibilities, and learning through targeted stages of iterative prototyping. A key component of the process not only to solve but to define problems.	Stanford University REDLab http://web.stanford.edu/group/redlab/cgi-bin/faq.php
Exit tickets	**Short formative assessment exercise given at the end of class or a unit that helps the teacher obtain information about students' current levels of understanding.** Exit tickets generally ask students to: Rate their current understanding of new learning; Analyze and reflect on their efforts around the learning; Provide feedback to teachers on an instructional strategy; Provide feedback about the materials and teaching. (Closely related terms: exit slips)	The Many Uses of Exit Slips, ASCD http://www.ascd.org/publications/educational-leadership/oct12/vol70/num02/The-Many-Uses-of-Exit-Slips.aspx
Formative assessment	**Educators use multiple means (such as demonstration, conversation, dialogue, mini-quiz) to provide feedback for individuals and to plan next steps.** Formative assessment includes student reflection and shared responsibility for learning.	"Personalized Learning."; The Best Value in Formative Assessment, ASCD http://www.ascd.org/publications/educational-leadership/dec07/vol65/num04/The-Best-Value-in-Formative-Assessment.aspx
Growth mindset	**The belief that one's abilities develop through hard work and persistence rather than innate talent.**	"What is Mindset." http://mindsetonline.com/whatisit/about/index.html
Individual learning plan	**Learners and their advisers decide on (and assess) specific personal and academic goals, based on readiness, strengths, needs, and interests.**	"Personalized Learning."

* Definitions are either excerpted or adapted from the sources listed. Additional selected sources are listed in Appendix E.

TERM	DEFINITION	SOURCE*
Learner-centered	**Integrating personalization, anytime-anywhere learning, competency education, and student ownership to foster postsecondary, career, and civic success.** Sometimes used to indicate an older or professional population in the learner role.	Students at the Center FAQs and Definitions http://studentsatthecenterhub.org/wp-content/uploads/2015/04/SATC-FAQ-Definitions-010815.pdf
Learning progressions	**The purposeful sequencing of teaching and learning expectations across multiple developmental stages, ages, or grade levels.** In this context, in the personalized context, learning progressions also include careful attention to the individual's prior understanding necessary for building future, more complex understanding, as well as the need for students to encounter content matter in different ways and over time to deepen understanding.	Ed Reform Glossary. http://edglossary.org/learning-progression/
Mastery	**The targeted level of achievement relative to a standard or learning goal.** "Demonstrating mastery" is synonymous with "demonstrating proficiency" or "meeting the standard."	Maine Department of Education. http://mainelearning.net/wp-content/uploads/group-documents/22/1358619029-GlossaryMDOEJan13DRAFT.docx
Metacognitive skills	Learning processes and behaviors involving self-reflection and critical thinking, information literacy, reasoning and argumentation, innovation, self-regulation, selection of learning strategies, and learning habits.	Rethinking the Notion of 'Noncognitive', EdWeek http://www.edweek.org/ew/articles/2013/01/23/18conley.h32.html
Ownership, student	Students have frequent opportunities to direct and to reflect and improve on their own learning progression toward college and career ready standards with the help of formative assessments that help them understand their own strengths and learning challenges. Students take increasing responsibility for their own learning, using strategies for self-regulation. Students also support and celebrate each other's progress and experience a sense of commitment and belonging to the learning group. (Closely related terms: student voice and choice, student agency.)	"The Students at the Center Framework."

* Definitions are either excerpted or adapted from the sources listed. Additional selected sources are listed in Appendix E.

Appendix A: Glossary of Terms

TERM	DEFINITION	SOURCE*
Peer assessment	**Students give informed feedback to one another.** Effective peer assessment connects to clear standards and involves constructive critique. Feedback from peers can carry more immediacy and achieve greater volume than that from teachers. It ideally relates to works in progress so that peers may use the feedback to revise their work. Finally, being able to provide peers with positive, usable feedback is also a critical life skill.	"Student-centered Assessment Guide: Peer Assessment." http://studentsatthecenterhub.org/resource/student-centered-assessment-guide-peer-assessment/
Personalized learning	**As much as possible, personalized instruction meets students' individual developmental needs, skills, and interests.** Effective personalized learning requires that the educator and the institution be capable of seeing and addressing differences in each learner's outlook, behaviors, beliefs, and cultural capital. Students develop connections with each other, their teachers, and other adults in support of their learning. Personalized is not the same as individualized learning, which entails teacher-driven instruction tailored to ensuring students achieve basic skills.	"The Students at the Center Framework."
Proficiency-based progress	**The actual work of learners demonstrates** their progress toward meeting agreed-on learning outcomes. Closely related terms: competency-based, mastery-based)	Sturgis (2014)
Project-based learning	**Students gain knowledge and skills over an extended period in which they investigate and respond to a complex question, problem, or challenge.** Quality PBL includes: Key Knowledge, Understanding, and Success Skills; Challenging Problem or Question; Sustained Inquiry; Authenticity; Student Voice & Choice; Reflection; Critique & Revision; Public Product	"What is Project Based Learning?" http://bie.org/about/what_pbl

* Definitions are either excerpted or adapted from the sources listed. Additional selected sources are listed in Appendix E.

TERM	DEFINITION	SOURCE*
Real-world learning	**Educational and instructional techniques that connects learning in school to authentic issues, problems, and applications.** Students are more likely to be interested in what they are learning, more motivated to learn new concepts and skills, and better prepared to succeed in college, careers, and adulthood if what they are learning mirrors out-of-school contexts, equips them with practical and useful skills, and addresses topics that are relevant and applicable to their lives outside of school. Examples include early colleges, work-based learning, and service-learning.	Ed Reform Glossary. http://edglossary.org/authentic-learning/
Self-assessment	**Students identify strengths and weaknesses in their own work and revise accordingly.** Effective self-assessment involves students comparing their work to clear standards and generating feedback for themselves about where they need to make improvements, then having time to make those improvements before submitting for a grade.	"Student-centered Assessment Guide: Peer Assessment." http://studentsatthecenterhub.org/resource/student-centered-assessment-guide-peer-assessment/
Self-regulation	The ability to be goal-directed, demonstrate control over and responsibility for one's focus and effort when engaged in learning activities, and to strategically modulate one's emotional reactions or states in order to be more effective at coping and engaging with the environment.	Toshalis & Nakkula (2012), p. 18; UDL Guidelines - Version 2.0: Principle III. Provide Multiple Means of Engagement
Student agency	See **Agency**	Toshalis & Nakkula (2012)
Student-centered	**Integrating personalization, anytime-anywhere learning, competency education, and student agency and ownership to foster postsecondary, career, and civic success.**	"Students at the Center FAQs and Definitions" http://www.jff.org/sites/default/files/iniatiatives/files/SATC-FAQ-Definitions-010815.pdf
Student-owned	See **Ownership, student**	"The Students at the Center Framework."
Student choice	**Learners have significant and meaningful choices regarding their learning experiences.**	"Personalized Learning."

* Definitions are either excerpted or adapted from the sources listed. Additional selected sources are listed in Appendix E.

Appendix A: Glossary of Terms

TERM	DEFINITION	SOURCE*
Student voice	Learners have significant and meaningful input into decisions that will shape their learning experiences and those of their peers either in or outside of school settings.	"Personalized Learning"; Toshalis & Nakkula (2012)
Transfer	The process through which an individual becomes capable of taking what was learned in one situation and applying it to new situations.	Pellegrino & Hilton (2012)
Universal design for learning	Providing content via multiple means of engagement, representation, action, and expression.	Pellegrino & Hilton (2012)

* Definitions are either excerpted or adapted from the sources listed. Additional selected sources are listed in Appendix E.

Appendix B
Methodology

The writing team that developed these Competencies began by defining the student competencies necessary for graduate success in today's economy. Over the past decade, much has been written and researched to expand the definitions of secondary and postsecondary success to include greater weight across knowledge, skills, and dispositions (e.g., recent pieces such as Conley 2014, Pellegrino & Hilton 2012, Farrington et. al. 2013, Nagaoka et. al 2015). In addition to these research frameworks, we reviewed graduation requirements and standards for students in schools with explicit student-centered approaches and/or deeper learning goals (e.g., sampling from schools in networks such as Big Picture Learning, Expeditionary Learning, and High Tech High).

With these compiled lists in mind, we began back-mapping to what educators would need to know and do to enable their students to reach those identified outcomes. Simply put, if we expect learners to achieve these cognitive, metacognitive, and employability skills to be successful, then we need to define, support, and train the kinds of educators capable of teaching such things. We developed the initial criteria for the educator framework by crosswalking ten educator competency lists. We selected frameworks to represent a range, from highly tested, multi-state and school site-adopted lists developed for our current mode of education (e.g., the Danielson Framework), to newer and sometimes more theoretical lists designed for personalized, innovative settings (e.g., iNACOL's Blended Learning Educator Competencies). For a complete list of original educator source material, see Appendix C.

We then grouped, revised text to avoid duplications, and eliminated skills that clearly did not point toward achieving a personalized, learner-centered approach. We presented the frameworks in two feedback rounds with approximately 20 state and district practitioners in each, asking them to read for: 1. what was missing; 2. where the list needed to distinguish better between the personalized, learner-centered approaches and basic good teaching. The third revision went to additional CCSSO staff experts to craft a side-by-side comparison with the InTASC standards. We also turned that version into an HTML document for a comment period during which we solicited feedback from a broad spectrum of education practitioners, policy makers, researchers, and thought leaders (please see the breakdown of respondents). Through the digital document, we collected over 250 comments from close to 35 additional people. This final piece reflects the incredible wealth of information and thoughtful input we gathered from these multiple rounds of vetting.

Total Respondents	77
State policymakers (e.g., commissioners, deputies)	12
State implementers (e.g., TA Providers, Consultants)	15
Researchers	9
Thought leaders and nonprofits	17
District leaders	11
School leaders	6
Teachers	7

Appendix C
Source Frameworks

The authors developed the original draft of the Competencies from review and analysis of the following contributions to the field:

1. Council of Chief State School Officers. 2013. *Interstate Teacher Assessment and Support Consortium InTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0: A Resource for Ongoing Teacher Development.* http://www.ccsso.org/Documents/2013/2013_INTASC_Learning_Progressions_for_Teachers.pdf

2. The Danielson Group. 2014. "Correlation between the Danielson Framework for Teaching and the Interstate Teacher Assessment and Support Consortium (InTASC) Standards." http://bit.ly/1JDT27E

3. The Institute @ CESA #1. 2014. "Personalized Learning Skill Sets for Educators." http://studentsatthecenterhub.org/wp-content/uploads/2015/04/CESA1_Personalized_Learning_Skill_Sets_Brief_2014_15.pdf

4. The International Association for K-12 Online Learning (iNACOL). 2014. *iNACOL Blended Learning Teacher Competencies Framework.* http://www.inacol.org/resource/inacol-blended-learning-teacher-competency-framework/

5. Barbara Cervone & Kathleen Cushman. *Teachers at Work: Six Exemplars of Everyday Practice* (Executive Summary). Jobs for the Future. Students at the Center: Student-Centered Learning Series. http://www.jff.org/publications/teachers-work—six-exemplars-everyday-practice-student-center-series

6. Digital Ready. *School Benchmarks.* New York Department of Education. http://studentsatthecenterhub.org/wp-content/uploads/2015/04/DigitalReadyBenchmarks.pdf

7. Big Picture/The Met. 2014. "Advisor Competencies." http://studentsatthecenterhub.org/wp-content/uploads/2015/04/BP-Advisor-Competencies-and-Skills-2014.pdf

8. Kirk Walters, Toni M. Smith, Steven Leinwand, Wendy Surr, Abigail Stein & Paul Bailey. 2014. *An Up-Close Look at Student-Centered Math Teaching: A Study of Highly Regarded High School Teachers and Their Students.* Nellie Mae Education Foundation. http://studentsatthecenterhub.org/resource/an-up-close-look-at-student-centered-math-teaching/

9. Stanford Center for Opportunity Policy in Education (SCOPE). 2014. *Enriching Student-Centered Practices in Your School: Questions and Strategies for Reflection.* https://edpolicy.stanford.edu/sites/default/files/scope-enriching-student-centered-practices.pdf

10. CAST. 2011. "UDL Framework." National Center on Universal Design for Learning. http://www.udlcenter.org/aboutudl/udlguidelines

11. Digital Promise. "Deeper Learning Micro-Credentials." http://www.digitalpromise.org/page/-/dpdocuments/microcredentials/mc_deeperlearning.pdf?nocdn=1

12. Ron Berger. 2011. *Core Practices: A Vision for Improving Schools.* Expeditionary Learning. http://elschools.org/best-practices/new-edition-expeditionary-learning-core-practices-book

Crosswalk of InTASC Model Core Teaching Standards to Educator Competencies for Personalized, Learner-Centered Teaching

Background on the InTASC Model Core Teaching Standards: The Model Core Teaching Standards ("Standards") were developed by states for states through the Council of Chief State School Officers' Interstate Teacher Assessment and Support Consortium (InTASC). The Standards articulate a common core of teaching knowledge and skills that cut across all subject areas and grade levels. Their purpose is to outline what all teachers should know and be able to do to help all students reach the goal of being college and career ready in today's world.

Many states rely on the InTASC Standards to define their own teacher standards, draft preparation program approval requirements, design teacher licensure assessments, and establish professional development requirements for license renewal and in-service growth. Some teacher education faculty, assessment developers, and professional development providers also utilize the standards when designing their respective programs.

How the Competencies fit with the Standards: While the Standards represent big-picture descriptions of what teachers should know and be able to do, the Educator Competencies for Personalized Learning ("Competencies") are written "one level down" in granularity. They are intended to provide greater specificity and a more concrete articulation of teacher knowledge, skills, and dispositions within the specific context of personalized learning environments.

The following crosswalks attempt to articulate (1) the alignment between the Standards and the Competencies, and (2) the unique concepts or areas of emphasis within each Standard that are called out by the Competencies.

Appendix D: Crosswalk of InTASC Model Core Teaching Standards to Educator Competencies for Personalized, Learner-Centered Teaching

Crosswalk Part One: InTASC Model Core Teaching Standards relevant to the Educator Competencies for Personalized, Learner-Centered Teaching Domains

The following table provides an overview of the Standards that are aligned to the Competencies' four domains.

Educator Competencies for Personalized, Learner-Centered Teaching	Related InTASC Standards
Cognitive Domain *The Cognitive Domain consists of what teachers **need to know** in order to create personalized, learner-centered environments. These include both the knowledge of key subject matter content and human and brain development that is needed in order to foster students' content learning and **metacognitive** development (e.g., critical thinking, information literacy, reasoning, argumentation, innovation, self-regulation, and learning habits).* **Competencies include:** 1. Utilize in-depth understanding of content and learning progressions to engage learners and lead individual learners toward mastery. 2. Have knowledge of the sub-skills involved in effective communication and apply it to instructional strategies that develop learners into effective communicators. 3. Understand and employ techniques for developing students' skills of metacognition, self-regulation, and perseverance.	**#4. Content Knowledge** *The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.* --- **#5. Application of Content** *The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.*

Educator Competencies for Personalized, Learner-Centered Teaching	Related InTASC Standards
Intrapersonal Domain *The Intrapersonal Domain contains the generalized "capacity to manage one's behavior and emotions to achieve one's goals"[xi] or what internal capacity personalized, learner-centered educators* **need to process.** *It comprises the habits of mind, expectations for students, and assumptions about the teaching profession that educators should have.* **Competencies include:** 1. Convey a dedication to all learners—especially those historically marginalized and/or least served by public higher education—reaching college, career, and civic readiness. 2. Demonstrate an orientation toward and commitment to a personalized, learner-centered vision for teaching and learning. 3. Engage in deliberate practices of adapting and modeling persistence and a growth mindset. 4. Facilitate and prioritize shifting to and maintaining a learner-centered culture. 5. Demonstrate an orientation toward and commitment to lifelong professional learning. 6. Analyze evidence to improve personal practices.	**#9. Professional Learning and Ethical Practice** *The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.*

Appendix D: Crosswalk of InTASC Model Core Teaching Standards to Educator Competencies for Personalized, Learner-Centered Teaching

Educator Competencies for Personalized, Learner-Centered Teaching	Related InTASC Standards
Interpersonal Domain *The Interpersonal Domain comprises the generalized ability to "express ideas and interpret and respond to messages from others."[xii] Encapsulating personalized, learner-centered educators'* **need to relate,** *this domain includes the social, personal, and leadership skills to foster beneficial relationships with students, peers, and the greater community.* **Competencies include:** 1. Design, strengthen, and participate in positive learning environments (i.e., school and classroom culture) that support individual and collaborative learning. 2. Build strong relationships that contribute to individual and collective success. 3. Contribute to college and career access and success for all learners, particularly those historically marginalized and/or least served by public higher education due to differences in background, demographics, learning style, or culture. 4. Seek appropriate individual or shared leadership roles to continue professional growth, advancement, and increasing responsibility for student learning and advancement.	**#1. Learner Development** *The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.* --- **#3. Learning Environments** *The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.* --- **#10. Leadership and Collaboration** *The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.*

Educator Competencies for Personalized, Learner-Centered Teaching	Related InTASC Standards
Instructional Domain	**#2. Learning Differences**
Skills in the instructional domain describe what personalized, learner-centered educators need to do to bring distinctly learner-centered pedagogical techniques into the classroom. These include creating engaging and relevant curriculum, managing classroom dynamics, and using instructional approaches and methods that build toward and assess mastery.	*The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.*
Competencies include:	**#6. Assessment**
1. Use a mastery approach to learning.	*The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.*
2. Use assessment and data as tools for learning.	
3. Customize the learning experience.	**#7 Planning for Instruction**
4. Promote student agency and ownership with regard to learning.	*The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.*
5. Provide opportunities for anytime/anywhere and real-world learning tied to learning objectives and standards.	
6. Develop and facilitate project-based learning experiences.	**#8. Instructional Strategies**
7. Use collaborative group work.	*The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.*
8. Use technology in service of learning.	

Appendix D: Crosswalk of InTASC Model Core Teaching Standards to Educator Competencies for Personalized, Learner-Centered Teaching

Crosswalk Part Two: Additional areas of emphasis within each InTASC Standard

The following table provides greater detail regarding the relationship between the 2013 InTASC Standards and the Competencies. The table should be used to understand how the Competencies either reinforce or call out specific areas of emphasis within each of the Standards. The table also provides references to related competencies for each standard.

InTASC Standard #1: Learner Development

The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher regularly assesses individual and group performance in order to design and modify instruction to meet learners' needs in each area of development (cognitive, linguistic, social, emotional, and physical) and scaffolds the next level of development. (b) The teacher creates developmentally appropriate instruction that takes into account individual students' strengths, interests and needs and that allow each student to advance and accelerate his/her learning. (c) The teacher collaborates with families, colleagues and other professionals to promote student growth and development.	Reinforces the InTASC standard. See related Educator Competencies for Personalized Learning: • **Cognitive #1:** Utilize in-depth understanding of content and learning progressions to engage learners and lead individual learners toward mastery. • **Cognitive #2:** Have knowledge of the sub-skills involved in effective communication and apply it to instructional strategies that develop learners into effective communicators. • **Cognitive #3:** Understand and employ techniques for developing students' skills of metacognition, self-regulation, and perseverance. • **Interpersonal #1:** Design, strengthen, and participate in positive learning environments (i.e., school and classroom culture) that support individual and collaborative learning. • **Interpersonal #2:** Build strong relationships that contribute to individual and collective success.

InTASC Standard #2: Learning Differences

The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher designs, adapts, and delivers instruction to address each student's diverse learning strengths and needs and creates opportunities for students to demonstrate their learning in different ways.	Reinforces the InTASC standard, while emphasizing that *all* students should receive the kind of personalized, "timely provisions" described in 2(b), not just some students with "particular learning differences or needs." Further clarifies that the "appropriate services and resources to meet specific learning differences or needs" described in 2(f) may be found outside the school building or occur outside the school day. Also further defines the concept of a mastery approach to learning implied by 2(c) by providing additional indicators.
(b) The teacher makes appropriate and timely provisions (pacing for individual rates of growth, task demands, communication, assessment, and response modes) for individual students who have particular learning differences or needs.	
(c) The teacher designs instruction to build on learners' prior knowledge and experiences, allowing learners to accelerate as they demonstrate their understandings.	See related Educator Competencies for Personalized Learning:
(d) The teacher brings multiple perspectives to the discussion of content, including attention to the students' personal, family, and community experiences and cultural norms.	• **Instructional #1:** Use a mastery approach to learning. • **Instructional #2:** Use assessment and data as tools for learning. • **Instructional #3:** Customize the learning experience. • **Instructional #4:** Promote student agency and ownership with regard to learning.
(e) The teacher incorporates tools of language development into planning and instruction, including strategies for making content accessible to English language learners and for evaluating and supporting their development of English proficiency.	• **Instructional #5:** Provide opportunities for anytime/anywhere and real-world learning tied to learning objectives and standards. • **Instructional #6:** Develop and facilitate project-based learning experiences. • **Instructional #7:** Use collaborative group work.
(f) The teacher accesses appropriate services and resources to meet specific learning differences or needs.	• **Instructional #8:** Use technology in service of learning.

Appendix D: Crosswalk of InTASC Model Core Teaching Standards to Educator Competencies for Personalized, Learner-Centered Teaching

InTASC Standard #3: Learning Environments

The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self motivation.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher collaborates with learners, families, and colleagues to build a safe, positive learning climate of openness, mutual respect, support, and inquiry.	Reinforces many of the ideas in the InTASC standard, but places emphasis on the learner as a co-creator of their learning environment. See related Educator Competencies for Personalized Learning:
(b) The teacher develops learning experiences that engage students in collaborative and self-directed learning and that extend their interaction with ideas and people locally and globally.	• **Cognitive #2:** Have knowledge of the sub-skills involved in effective communication and apply it to instructional strategies that develop learners into effective communicators
(c) The teacher collaborates with students to develop shared values and expectations for respectful interactions, rigorous academic discussions, and individual and group responsibility for quality work.	• **Cognitive #3:** Understand and employ techniques for developing students' skills of metacognition, self-regulation, and perseverance.
(d) The teacher manages the learning environment to actively and equitably engage learners by organizing, allocating, and coordinating the resources of time, space, and learners' attention.	• **Intrapersonal #1:** Convey a dedication to all learners – especially those historically marginalized and/or least served by public higher education – reaching college, career, and civic readiness.
(e) The teacher uses a variety of methods to engage students in evaluating the learning environment and collaborates with students to make appropriate adjustments.	• **Intrapersonal #2:** Demonstrate an orientation toward and commitment to a personalized, learner-centered vision for teaching and learning.
(f) The teacher communicates verbally and nonverbally in ways that demonstrate respect for and responsiveness to the cultural backgrounds and differing perspectives learners bring to the learning environment.	• **Intrapersonal #3:** Engage in deliberate practices of adapting and modeling persistence and a growth mindset.
	• **Intrapersonal #4:** Facilitate and prioritize shifting to and maintaining a learner-centered culture.
(g) The teacher promotes responsible learner use of interactive technologies to extend the possibilities for learning locally and globally.	• **Interpersonal #3:** Contribute to college and career access and success for all learners, particularly those historically marginalized and/or least served by public higher education due to differences in background, demographics, learning style, or culture.
(h) The teacher intentionally builds learner capacity to collaborate in face-to-face and virtual environments through applying effective interpersonal communication skills.	• **Instructional #4:** Promote student agency and ownership with regard to learning.

InTASC Standard #4: Content Knowledge

The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher effectively uses multiple representations and explanations that capture key ideas in the discipline, guide learners through learning progressions, and promote each learner's achievement of content standards.	Reinforces the InTASC standard. See related Educator Competencies for Personalized Learning: • **Cognitive #1:** Utilize in-depth understanding of content and learning progressions to engage learners and lead individual learners toward mastery. • **Instructional #8:** Use technology in service of learning.
(b) The teacher engages students in learning experiences in the discipline(s) they teach that encourage students to understand, question, and analyze ideas from diverse perspectives so that they master the content.	
(c) The teacher engages learners in applying methods of inquiry and standards of evidence used in the discipline.	
(d) The teacher stimulates student reflection on prior content knowledge, links new concepts to familiar concepts, and makes connections to learners' experiences.	
(e) The teacher recognizes when student misconceptions interfere with learning and creates experiences to build conceptual understanding. The teacher recognizes learner misconceptions in a discipline that interfere with learning, and creates experiences to build accurate conceptual understanding.	
(f) The teacher evaluates and modifies instructional resources and curriculum materials for their comprehensiveness, accuracy for representing particular concepts in the discipline, and appropriateness for his/her learners.	
(g) The teacher uses supplementary resources and technologies effectively to ensure accessibility and relevance for all learners.	
(h) The teacher creates opportunities for students to learn, practice, and master academic language in their content.	
(i) The teacher accesses school and/or district-based resources to evaluate the learner's content knowledge in their primary language.	

Appendix D: Crosswalk of InTASC Model Core Teaching Standards to Educator Competencies for Personalized, Learner-Centered Teaching

InTASC Standard #5: Application of Content

The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher develops and implements projects that guide learners in analyzing the complexities of an issue or question using perspectives from varied disciplines and cross-disciplinary skills (e.g., a water quality study that draws upon biology and chemistry to look at factual information and social studies to examine policy implications).	Reinforces the InTASC standard, while emphasizing that engaging learners in "applying content knowledge to real word problems" as described in 5(b) may very well occur in the real world through anytime/anywhere learning opportunities.

See related Educator Competencies for Personalized Learning: |
(b) The teacher engages learners in applying content knowledge to real world problems through the lens of interdisciplinary themes (e.g., financial literacy, environmental literacy).	• **Cognitive #2:** Have knowledge of the sub-skills involved in effective communication and apply it to instructional strategies that develop learners into effective communicators.
(c) The teacher facilitates learners' use of current tools and resources to maximize content learning in varied contexts.	• **Cognitive #3:** Understand and employ techniques for developing students' skills of metacognition, self-regulation, and perseverance.
(d) The teacher engages learners in questioning and challenging assumptions and approaches in order to foster innovation and problem solving in local and global contexts.	• **Instructional #5:** Provide opportunities for anytime/anywhere and real-world learning tied to learning objectives and standards
(e) The teacher develops learners' communication skills in disciplinary and interdisciplinary contexts by creating meaningful opportunities to employ a variety of forms of communication that address varied audiences and purposes.	
(f) The teacher engages learners in generating and evaluating new ideas and novel approaches, seeking inventive solutions to problems, and developing original work.	
(g) The teacher facilitates learners' ability to develop diverse social and cultural perspectives that expand their understanding of local and global issues and create novel approaches to solving problems.	
(h) The teacher develops and implements supports for learner literacy development across content areas.	

InTASC Standard #6: Assessment

The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher balances the use of formative and summative assessment as appropriate to support, verify, and document learning.	Reinforces the InTASC standard, especially the ideas conveyed in 6(a), 6(e), and 6(g), while adding additional specificity through Indicators that describe how educators can meet each of these competencies. Places additional emphasis on the learner's voice and choice in determining how they will demonstrate mastery.
(b) The teacher designs assessments that match learning objectives with assessment methods and minimizes sources of bias that can distort assessment results.	See related Educator Competencies for Personalized Learning:
(c) The teacher works independently and collaboratively to examine test and other performance data to understand each learner's progress and to guide planning.	• **Instructional #1:** Use a mastery approach to learning. • **Instructional #2:** Use assessment and data as tools for learning.
(d) The teacher engages learners in understanding and identifying quality work and provides them with effective descriptive feedback to guide their progress toward that work.	• **Instructional #3:** Customize the learning experience. • **Instructional #4:** Promote student agency and ownership with regard to learning.
(e) The teacher engages learners in multiple ways of demonstrating knowledge and skill as part of the assessment process.	• **Instructional #5:** Provide opportunities for anytime/anywhere and real-world learning tied to learning objectives and standards. • **Instructional #6:** Develop and facilitate project-based learning experiences.
(f) The teacher models and structures processes that guide learners in examining their own thinking and learning as well as the performance of others.	• **Instructional #7:** Use collaborative group work. • **Instructional #8:** Use technology in service of learning.
(g) The teacher effectively uses multiple and appropriate types of assessment data to identify each student's learning needs and to develop differentiated learning experiences.	
(h) The teacher prepares all learners for the demands of particular assessment formats and makes appropriate accommodations in assessments or testing conditions, especially for learners with disabilities and language learning needs.	
(i) The teacher continually seeks appropriate ways to employ technology to support assessment practice both to engage learners more fully and to assess and address learner needs.	

Appendix D: Crosswalk of InTASC Model Core Teaching Standards to Educator Competencies for Personalized, Learner-Centered Teaching

InTASC Standard #7: Planning for Instruction

The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher individually and collaboratively selects and creates learning experiences that are appropriate for curriculum goals and content standards, and are relevant to learners.	Reinforces many ideas in the InTASC standard, while adding additional specificity through Indicators that describe how educators can meet each of these competencies. Places emphasis on the learner's voice and choice in co-determining their learning goals and how they will meet them. Also adds the notion that teachers may both plan and deliver instruction not only in partnership with in-school specialists (as described in 7(e)) but also with community experts outside of the school.
(b) The teacher plans how to achieve each student's learning goals, choosing appropriate strategies and accommodations, resources, and materials to differentiate instruction for individuals and groups of learners.	See related Educator Competencies for Personalized Learning:
(c) The teacher develops appropriate sequencing of learning experiences and provides multiple ways to demonstrate knowledge and skill.	• **Instructional #1:** Use a mastery approach to learning. • **Instructional #2:** Use assessment and data as tools for learning.
(d) The teacher plans for instruction based on formative and summative assessment data, prior learner knowledge, and learner interest.	• **Instructional #3:** Customize the learning experience. • **Instructional #4:** Promote student agency and ownership with regard to learning.
(e) The teacher plans collaboratively with professionals who have specialized expertise (e.g., special educators, related service providers, language learning specialists, librarians, media specialists) to design and jointly deliver as appropriate effective learning experiences to meet unique learning needs.	• **Instructional #5:** Provide opportunities for anytime/anywhere and real-world learning tied to learning objectives and standards. • **Instructional #6:** Develop and facilitate project-based learning experiences. • **Instructional #7:** Use collaborative group work.
(f) The teacher evaluates plans in relation to short- and long-range goals and systematically adjusts plans to meet each student's learning needs and enhance learning.	• **Instructional #8:** Use technology in service of learning.

InTASC Standard #8: Instructional Strategies

The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher uses appropriate strategies and resources to adapt instruction to the needs of individuals and groups of learners.	Reinforces the InTASC standard, while adding additional specificity through Indicators that describe how educators can meet each of these competencies. Places emphasis on the learner as having voice and choice in their instructional strategies. See related Educator Competencies for Personalized Learning:
(b) The teacher continuously monitors student learning, engages learners in assessing their progress, and adjusts instruction in response to student learning needs.	• **Instructional #1:** Use a mastery approach to learning. • **Instructional #2:** Use assessment and data as tools for learning.
(c) The teacher collaborates with learners to design and implement relevant learning experiences, identify their strengths, and access family and community resources to develop their areas of interest.	• **Instructional #3:** Customize the learning experience. • **Instructional #4:** Promote student agency and ownership with regard to learning.
(d) The teacher varies his/her role in the instructional process (e.g., instructor, facilitator, coach, audience) in relation to the content and purposes of instruction and the needs of learners.	• **Instructional #5:** Provide opportunities for anytime/anywhere and real-world learning tied to learning objectives and standards. • **Instructional #6:** Develop and facilitate project-based learning experiences.
(e) The teacher provides multiple models and representations of concepts and skills with opportunities for learners to demonstrate their knowledge through a variety of products and performances.	• **Instructional #7:** Use collaborative group work. • **Instructional #8:** Use technology in service of learning.
(f) The teacher engages all learners in developing higher order questioning skills and metacognitive processes.	
(g) The teacher engages learners in using a range of learning skills and technology tools to access, interpret, evaluate, and apply inform.	
(h) The teacher uses a variety of instructional strategies to support and expand learners' communication through speaking, listening, reading, writing, and other modes.	
(i) The teacher asks questions to stimulate discussion that serves different purposes (e.g., probing for learner understanding, helping learners articulate their ideas and thinking processes, stimulating curiosity, and helping learners to question).	

Appendix D: Crosswalk of InTASC Model Core Teaching Standards to Educator Competencies for Personalized, Learner-Centered Teaching

InTASC Standard #9: Professional Learning and Ethical Practice

The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher engages in ongoing learning opportunities to develop knowledge and skills in order to provide all learners with engaging curriculum and learning experiences based on local and state standards.	Reinforces the InTASC standard, while emphasizing the need to embrace a learner-centered vision for teaching and learning.
(b) The teacher engages in meaningful and appropriate professional learning experiences aligned with his/her own needs and the needs of the learners, school, and system.	See related Educator Competencies for Personalized Learning: • **Intrapersonal #1:** Convey a dedication to all learners – especially those historically marginalized and/or least served by public higher education – reaching college, career, and civic readiness.
(c) Independently and in collaboration with colleagues, the teacher uses a variety of data (e.g., systematic observation, information about learners, research) to evaluate the outcomes of teaching and learning and to adapt planning and practice.	• **Intrapersonal #2:** Demonstrate an orientation toward and commitment to a personalized, learner-centered vision for teaching and learning. • **Intrapersonal #3:** Engage in deliberate practices of adapting and modeling persistence and a growth mindset.
(d) The teacher actively seeks professional, community, and technological resources, within and outside the school, as supports for analysis, reflection, and problem-solving.	• **Intrapersonal #4:** Facilitate and prioritize shifting to and maintaining a learner-centered culture. • **Intrapersonal #5:** Demonstrate an orientation toward and commitment to lifelong professional learning.
(e) The teacher reflects on his/her personal biases and accesses resources to deepen his/her own understanding of cultural, ethnic, gender, and learning differences to build stronger relationships and create more relevant learning experiences.	• **Intrapersonal #6:** Analyze evidence to improve personal practices.
(f) The teacher advocates, models, and teaches safe, legal, and ethical use of information and technology including appropriate documentation of sources and respect for others in the use of social media.	

InTASC Standard #10: Leadership and Collaboration

The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Performances	Areas of Emphasis for Personalized Learning
(a) The teacher takes an active role on the instructional team, giving and receiving feedback on practice, examining learner work, analyzing data from multiple sources, and sharing responsibility for decision making and accountability for each student's learning.	Reinforces the InTASC standard. See related Educator Competencies for Personalized Learning: • **Intrapersonal #5:** Demonstrate an orientation toward and commitment to lifelong professional learning. • **Interpersonal #4:** Seek appropriate individual or shared leadership roles to continue professional growth, advancement, and increasing responsibility for student learning and advancement.
(b) The teacher works with other school professionals to plan and jointly facilitate learning on how to meet diverse needs of learners.	
(c) The teacher engages collaboratively in the school-wide effort to build a shared vision and supportive culture, identify common goals, and monitor and evaluate progress toward those goals.	
(d) The teacher works collaboratively with learners and their families to establish mutual expectations and ongoing communication to support learner development and achievement.	
(e) Working with school colleagues, the teacher builds ongoing connections with community resources to enhance student learning and well being.	
(f) The teacher engages in professional learning, contributes to the knowledge and skill of others, and works collaboratively to advance professional practice.	
(g) The teacher uses technological tools and a variety of communication strategies to build local and global learning communities that engage learners, families, and colleagues.	
(h) The teacher uses and generates meaningful research on education issues and policies.	
(i) The teacher seeks appropriate opportunities to model effective practice for colleagues, to lead professional learning activities, and to serve in other leadership roles.	
(j) The teacher advocates to meet the needs of learners, to strengthen the learning environment, and to enact system change.	
(k) The teacher takes on leadership roles at the school, district, state, and/or national level and advocates for learners, the school, the community, and the profession.	

Appendix E
Selected Resources from Students at the Center

The following resources contain the Students at the Center white papers, as well as research by other authors and institutions that closely influence our work. Each of the Students at the Center papers is a synthesis and analysis of dozens of related studies and research.

Learning Theory

Duckworth, Angela L., Christopher Peterson, Michael D. Matthews, & Dennis R. Kelly. 2007. "Grit: Perseverance and Passion for Long-Term Goals." *Journal of Personality and Social Psychology.* Vol. 92, No. 6.

Dweck, Carol S. 2006. *Mindset: The New Psychology of Success.* New York, NY: Random House.

Farrington, Camille A., Melissa Roderick, Elaine Allensworth, Jenny Nagaoka, Tasha Seneca Keyes, David W. Johnson, & Nicole O. Beechum. 2012. *Teaching Adolescents to Become Learners: The Role of Noncognitive Factors in Shaping School Performance: A Critical Literature Review.* Chicago, IL: University of Chicago Consortium on Chicago School Research.

Hinton, Christina, Kurt. W. Fischer, & Catherine Glennon. 2012. *Mind, Brain, and Education.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Mitra, Dana L. 2009. "Strengthening Student Voice Initiatives in High Schools: An Examination of the Supports Needed for School-Based Youth-Adult Partnerships." *Youth and Society.* Vol. 40.

Toshalis, Eric & Nakkula, Michael J. 2012. *Motivation, Engagement, and Student Voice.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Zimmerman, Barry J. 1990. "Self-regulated Learning and Academic Achievement: An Overview." *Educational Psychologist.* Vol. 25, No. 1.

Application in the Classroom and Content Areas

Catherine Bitter, James Taylor, Kristina Zeiser, & Jordan Rickles. 2014. *Providing Opportunities for Deeper Learning. Report #2 Findings from the Study of Deeper Learning: Opportunities and Outcomes.* Washington, DC: American Institutes for Research.

Cervone, Barbara & Kathleen Cushman. 2012. *Teachers at Work: Six Exemplars of Everyday Practice.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Dede, Chris. 2014. *The Role of Digital Technologies in Deeper Learning.* Students at the Center: Deeper Learning Research Series. Boston, MA: Jobs for the Future.

Gutierrez, Rochelle & Sonia E. Irving. 2012. *Latino/a and Black Students and Mathematics.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Rose, David & Jenna Gravel. 2012. *Curricular Opportunities in the Digital Age.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Tatum, Alfred W. 2012. *Literary Practices for African-American Male Adolescents*. Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Walters, Kirk, Toni M. Smith, Steve Leinwand, Wendy Surr, Abigail Stein, & Paul Bailey. 2014. *An Up-Close Look at Student-Centered Math Teaching: A Study of Highly Regarded High School Teachers and Their Students*. Washington, DC: American Institutes for Research.

School Improvement

Cator, Karen, Bonnie Lathram, Carrie Schneider, & Tom Vander Ark. 2015. *Preparing Leaders for Deeper Learning*. Seattle, WA: Getting Smart.

Levin, Ben, Amanda Datnow, & Nathalie Carrier. 2012. *Changing School District Practices*. Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Mette Huberman, Catherine Bitter, Jennifer Anthony, & Jennifer O'Day. 2014. *The Shape of Deeper Learning: Strategies, Structures, and Cultures in Deeper Learning Network High Schools. Report #1 Findings from the Study of Deeper Learning: Opportunities and Outcomes*. Washington, DC: American Institutes for Research.

Yonezawa, Susan, Larry McClure, & Makeba Jones. 2012. *Personalization in Schools*. Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Competency Education

Bloom, Benjamin. 1971. *Mastery Learning*. New York, NY: Holt, Rinehart, & Winston.

Le, Cecilia, Rebecca E. Wolfe, & Adria Steinberg. 2014. *The Past and the Promise: Today's Competency Education Movement*. Students at the Center: Competency Education Research Series. Boston, MA: Jobs for the Future.

Lewis, Matthew W., Rick Eden, Chandra Garber, Mollie Rudnick, Lucrecia Santibañez, & Tiffany Tsai. 2014. *Equity in Competency Education: Realizing the Potential, Overcoming the Obstacles*. Students at the Center: Competency Education Research Series. Boston, MA: Jobs for the Future.

Patrick, Susan & Chris S. Sturgis. 2015. *Maximizing Competency Education and Blended Learning: Insights from Experts*. Vienna, VA: iNACOL.

Sturgis, Chris S. 2014. *Progress and Proficiency: Redesigning Grading for Competency Education*. Vienna, VA: CompetencyWorks.

Defining College, Career, and Civic Readiness

Conley, David T. 2010. *College and Career Ready: Helping All Students Succeed Beyond High School*. San Francisco, CA: Jossey-Bass.

Appendix E: Selected Resources from Students at the Center

Hoffman, Nancy. 2015. *Let's Get Real: Deeper Learning and the Power of the Workplace.* Students at the Center: Deeper Learning Research Series. Boston, MA: Jobs for the Future.

Levine, Peter & Kei Kawashima-Ginsberg. 2015. *Civic Education and Deeper Learning.* Students at the Center: Deeper Learning Research Series. Boston, MA: Jobs for the Future.

Nagaoka, Jenny, Camille A. Farrington, Stacy B. Ehrlich, & Ryan D. Heath. 2015. *Foundations for Young Adult Success: A Developmental Framework.* Chicago, IL: University of Chicago Consortium on Chicago School Research.

Zeiser, Kristina, James Taylor, Jordan Rickles, Michael S. Garet, & Michael Segeritz. 2014. *Evidence of Deeper Learning Outcomes. Report #3 Findings From the Study of Deeper Learning: Opportunities and Outcomes.* Washington, DC: American Institutes for Research.

Assessment

Andrade, Heidi & Gregory J. Cizek, eds. 2010. *Handbook of Formative Assessment.* New York, NY: Routledge.

Andrade, Heidi, Kristen Huff, & Georgia Brooke. 2012. *Assessing Learning.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Conley, David T. 2014. *A New Era for Educational Assessment.* Students at the Center: Deeper Learning Research Series. Boston, MA: Jobs for the Future.

Pellegrino, James & Margaret L. Hilton, eds. 2012. *Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century.* Washington, DC: National Academy Press.

Wolfe, Rebecca E. 2012. *Aligning Competencies to Rigorous Standards for Off-track Youth: A Case Study of Boston Day and Evening Academy.* Boston, MA: Jobs for the Future.

Zeiser, Kristina, James Taylor, Jordan Rickles, Michael S. Garet, & Michael Segeritz. 2014. *Evidence of Deeper Learning Outcomes. Report #3 Findings From the Study of Deeper Learning: Opportunities and Outcomes.* Washington, DC: American Institutes for Research.

Equity and Diverse Learners

Gutierrez, Rochelle & Sonia E. Irving. 2012. *Latino/a and Black Students and Mathematics.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Lewis, Matthew W., Rick Eden, Chandra Garber, Mollie Rudnick, Lucrecia Santibañez, & Tiffany Tsai. 2014. *Equity in Competency Education: Realizing the Potential, Overcoming the Obstacles.* Students at the Center: Competency Education Research Series. Boston, MA: Jobs for the Future.

Rose, David H. & Jenna W. Gravel. 2012. *Curricular Opportunities in the Digital Age.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Tatum, Alfred W. 2012. *Literary Practices for African-American Male Adolescents.* Students at the Center: Student-Centered Learning Research Series. Boston, MA: Jobs for the Future.

Endnotes

[i] See, for example, the Institute@CESA#1:
http://www.cesa1.k12.wi.us/institute/designdevelop/professional-development.cfm, Digital Promise micro-credentials
http://www.digitalpromise.org/initiatives/educator-micro-credentials

[ii] Please see: http://www.jff.org/initiatives/students-center/topics for a complete list of JFF's Students at the Center research syntheses and sources. In addition, the edited volume *Anytime, Anywhere: Student Centered Learning for Schools and Teachers* (Wolfe, Steinberg, & Hoffman 2013) contains numerous sources used in framing this definition. Finally, a selected bibliography can be found in Appendix E.

[iii] See also: the studies cited in http://www.nmefoundation.org/resources/student-centered-learning/centered-on-results

[iv] See for example, Cator et al. 2015; Arnett 2015; *Startup Teacher Education: A Fresh Take on Teacher Credentialing*. Lexington, MA: Clayton Christensen Institute for Disruptive Innovation; Announcing NCTAF's Great Teaching Initiative, the National Commission on Teaching America's Future. 2015. http://nctaf.org/announcements/announcing-nctafs-great-teaching-initiative/; Relay Graduate School of Education, Our Approach, http://www.relay.edu/about/approach; The Institute@CESA#1, Professional Development for Personalized Learning, http://www.cesa1.k12.wi.us/institute/designdevelop/professional-development.cfm

[v] Definitions of the cognitive, intrapersonal, and interpersonal domains for students adapted from Pellegrino & Hilton 2012.

[vi] Definitions of the cognitive, intrapersonal, and interpersonal domains for students adapted from Pellegrino & Hilton 2012.

[vii] Definitions of the cognitive, intrapersonal, and interpersonal domains for students adapted from Pellegrino & Hilton 2012.

[viii] See: http://www.hewlett.org/library/hewlett-foundation-publication/deeper-learning-defined

[ix] See: http://www.p21.org/our-work/p21-framework

[x] Definitions of the cognitive, intrapersonal, and interpersonal domains for students adapted from Pellegrino & Hilton 2012.

[xi] Definitions of the cognitive, intrapersonal, and interpersonal domains for students adapted from Pellegrino & Hilton 2012.

[xii] Definitions of the cognitive, intrapersonal, and interpersonal domains for students adapted from Pellegrino & Hilton 2012.

EDUCATOR COMPETENCIES FOR PERSONALIZED, LEARNER-CENTERED TEACHING

Jobs for the Future and the Council of Chief State School Officers